Paper Building Blocks

Create "building blocks" out of paper. How strong will your structure be?

Kit contains:

- 15 strips of paper for triangles
- 6 strips of paper for squares
- 4 strips of paper for planks

You will need: tape and small weights such as pennies or paper clips.

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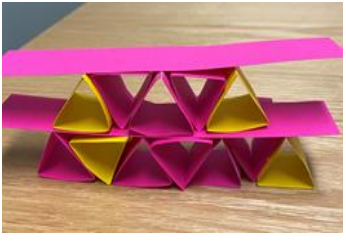
INSTRUCTIONS

Step 1. Fold the triangle and square strips of paper on the lines. Tape the ends together.

Step 2. Now you can build with your paper blocks!



Try building by putting the triangles together in an up-down pattern. Make a row and then put a platform on top. Make another row and top with another platform.

Once you've built your structure, try putting different things on top to see how much weight you can balance just on paper! Make different types of structures using different blocks in different ways. What type of structures in the strongest? Which blocks work the best?

WHAT'S GOING ON?

Most of the strength of your creations comes from triangles. Triangles are a really strong shape for building, and you see them in structures all around the world. When pressure

is put on the point of a triangle, it gets spread out evenly to both sides below it, so the triangle doesn't bend or break.

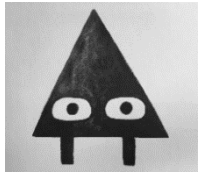
But your creation doesn't have to be strong. Being creative and making structures that look cool and that you enjoy is important too!

People who think about building structures and how to make them as strong as possible are called structural engineers.

Source: https://babbledabbledo.com/science-for-kids-paper-building-blocks/

LEARN MORE ABOUT IT!

Books (Available at MGPL):



- *Triangle* by Mac Barnett
- *10-minute Engineering Projects* by Sarah Schuette
- *Building* by Philip Wilkinson
- *Building Structures and Towers* by Tammy Enz
- *Build It! Structures, Systems, and You* by Adrienne Mason
- *Bigger! Bigger!* by Leslie Patricelli
- *Crash! Boom! A Male Tale* by Robie H. Harris
- *Jack the Builder* by Stuart J. Murphy

Multimedia:

- A great video about triangles in bridges: https://bit.ly/3vuarQf
- A video explaining why triangles are so strong: https://bit.ly/3bMM1tn